SPARE PARTS MASTER

# Operating Instructions

DOUBLE DECK AMPLIFIER

# DC-J210/DC-J110

FM/AM DIGITAL SYNTHESIZER TUNER

# F-J210

AUTO RETURN STEREO TURNTABLE

# PL-J210

SD, SL, YPW

Thank you for buying this PIONEER product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

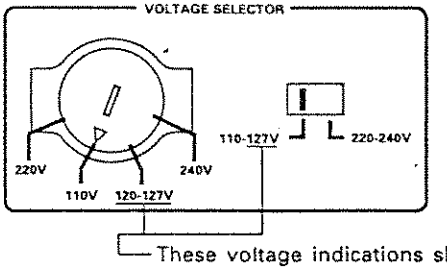
## DEMO Function

If the FUNCTION (DEMO) button is pressed when the power is in STANDBY mode, the demonstration mode will be selected and power will be turned ON automatically.
In the demo mode, various functions of this system appear on the display.
Since the unit automatically searches for a program source which can be played, you can also enjoy listening to the selected source.

## LINE VOLTAGE SELECTOR SWITCHES

**Only multivoltage models are provided with these switches. U.S., Canadian, European, U.K., and Australian models are not provided with them.**
**Mains voltages in Saudi Arabia are 127V and 220V only. Never use this model with 110V setting in Saudi Arabia.**
Before your model is shipped from the factory, these switches are set to the power requirements of the destination; nevertheless, you should check that they are set properly before plugging the power cord into the AC outlet.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selectors and adjust to the voltage value of your area.




These voltage indications show 120V only with Singapore model.

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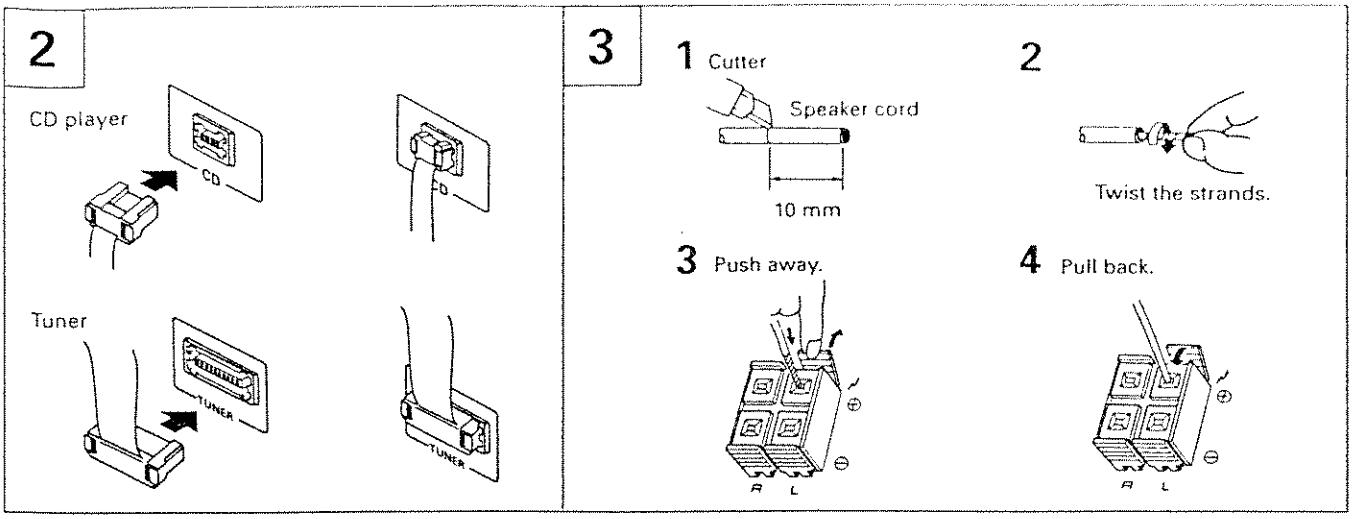
*The Art of Entertainment*




P ‘r to page 2 for the connections diagram 1.
① ccessory FM antenna
② Accessory AM loop antenna
③ FM/AM tuner (F-J210)
④ Turntable (Separately sold PL-J210, etc.)
⑤ Tuner flat cable
⑥ Surround speaker system
⑦ CD player flat cable
⑧ Double deck amplifier (DC-J210/DC-J110)
⑨ Turntable power supply cord
⑩ Speakers cords
⑪ Speaker system
⑫ Accessory Power cord
⑬ CD player (PD-J210T or PD-J215M)
⑭ Video cassette recorder (VCR)
⑮ To the AC wall socket
⑯ Audio cord (White)
⑰ Audio cord (Red)
⑱ AC INLET jack

Plug the power cord into the AC wall socket only after all the connections have been completed.

## ?OCEED AS FOLLOWS WITH THE SETUP AND CONNECTIONS

1. **Place the cassette deck amplifier on top of the CD player.**
2. **Connect the CD player (PD-J210T or PD-J215M) flat cable ⑦ to cassette deck amplifier.**
3. **Place the tuner on top of the cassette deck amplifier.**
4. **Connect the tuner flat cable ⑤ to cassette deck amplifier.**

### Tuner and CD player connections (Fig. 2)

Insert the connector until it locks, thus ensuring that it is connected. When disconnecting the connector, pull it in the opposite direction while pressing the left and right claws.

*NOTE:*
*When connecting or disconnecting the input/output cable, do so only after disconnecting the power plug from the wall socket.*

5. **Connect the FM antenna ① and the AM loop antenna ② to the tuner's antenna terminals.**
6. **Place the turntable on top of the tuner.**
7. **Connect the turntable power supply cord ⑨ and audio cords to the cassette deck amplifier's jacks.**
   If using the turntable PL-J210, connect the turntable's audio cords and power supply cord respectively to the cassette deck amplifier's PHONO jacks and DC 12V OUTPUT jack.
   If using a different turntable, connect its audio cord and ground cord.
8. **Use the VCR IN/OUT jacks for connection to the audio output jacks and audio input jacks of a VCR.**

*NOTE:*
- *Insert the plugs securely into the jacks. Improper connection can lead to sound distortion or malfunction.*
- *The white plug is for the left channel connection and the red plug for the right channel connection.*

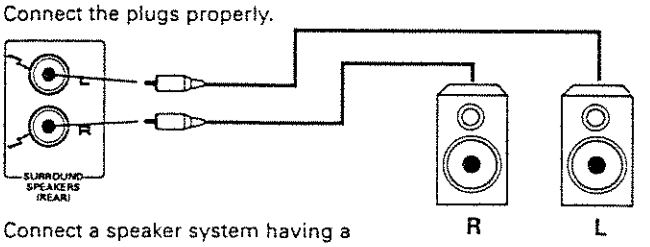
9. **Connect the speaker cords ⑩ to SPEAKERS terminals. (Fig. 3)**
   Connect the "+" terminals on the cassette deck amplifier to the "+" terminals on the speakers, the "–" terminals on the cassette deck amplifier to the "–" terminals on the speakers.

*NOTE:*
*Do not allow the conductors of the cords to project out of the terminals or to come into contact with other conductors. A breakdown or failure may occur when conductors touch.*

**Speaker impedance**
Connect speaker systems with a nominal impedance ranging from 6 to 16 Ω.

### Surround speaker connection

Connect the plugs properly.




Connect a speaker system having a nominal impedance of 16 Ω or more.

10. **Finally, connect the power cord ⑫ to the AC INLET jack ⑱ and AC wall socket ⑮.**

# SURROUND SYSTEM

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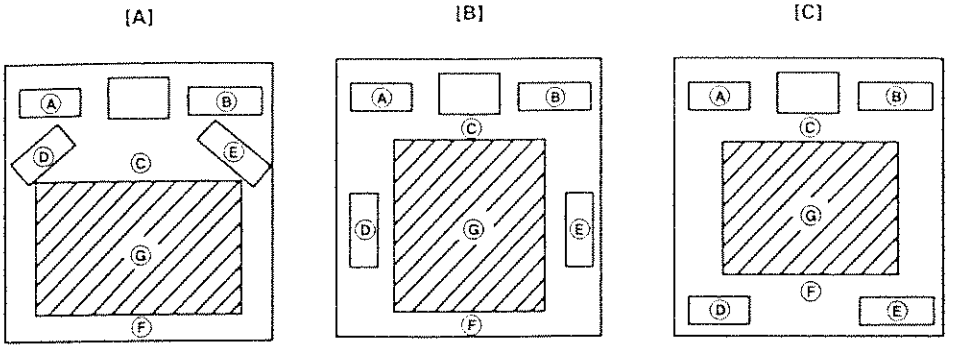



## .ıat is surround sound?

Normally with ordinary stereo, sound comes only from speakers in front of the listener; however, in a concert hall or theater, sound reflected from the walls and ceiling reaches the listener from all directions. This accounts for the feeling of ambience or spaciousness of a live performance.
Surround sound works to reproduce these effects to produce fuller, more "live" sound.

## WIDE (SURROUND & WIDE)

When the surround speakers are not connected, the SURROUND & WIDE function may be activated. This function enhances the stereo effect.
Note however, that it does not operate in the case of a monaural source.

## Speaker system placement examples (Fig. 8)

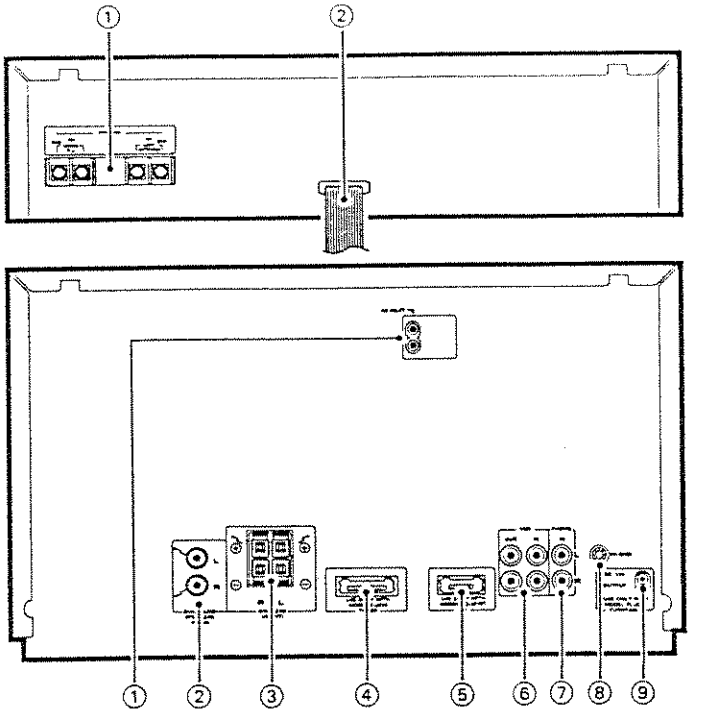
The sound effects obtained in a surround system depend on speaker placement. Experiment with various arrangements to find the one most suited to your tastes.
Placing the speakers slightly higher than ear level contributes sound quality.

**[Case A]**
Good sound dispersion; recommended for movies, etc.

**[Case B]**
Sound appears to come from directly in front of listener. Good for listening to music recordings.

**[Case C]**
Offers most varied effects; good for watching sports programs or listening to live recordings.
Ⓐ Front speaker left
Ⓑ Front speaker right
Ⓒ Front
Ⓓ Surround speaker left
Ⓔ Surround speaker right
Ⓕ Rear
Ⓖ Listening area

# PANEL FACILITIES




## REAR PANEL FACILITIES

### Tuner: F-J210

**① FM/AM ANTENNA terminals**
Antennas must be connected to these terminals: otherwise you will not be able to receive stations. See page 4 for details on ANTENNA CONNECTIONS.

**② TUNER flat cable**
Connect to the TUNER jack of the cassette deck amplifier.

### Double Deck Amplifier: DC-J210/DC-J110

**① AC INLET jack**
Connect the power cord here.

**② SURROUND SPEAKERS jacks**
Connect the surround speaker systems.

*NOTE:*
*Connect a speaker system having a nominal impedance of 16 Ω or more.*

**③ SPEAKERS terminals**
L: Connect the left speaker systems as seen from the listening position.
R: Connect the right speaker system as seen from the listening position.

*NOTE:*
*Connect a speaker system having a nominal impedance ranging from 6 Ω to 16 Ω.*

**④ TUNER jacks**
Connect the tuner flat cable here.

**⑤ CD jacks**
Connect to a compact disc player PD-J210T or PD-J215M flat cable.

**⑥ VCR IN/OUT jacks**
IN : Connect to audio output jacks of VCR.
OUT: Connect to audio input jacks of VCR.

**⑦ PHONO input jacks**
Connect the audio cord of the turntable to these jacks.

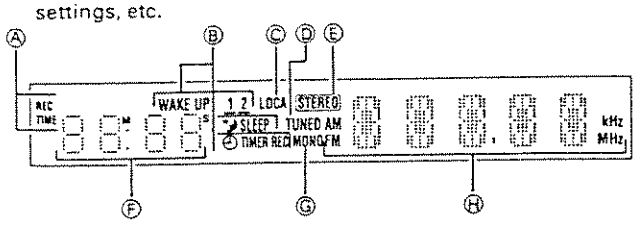
**⑧ Ground terminal (GND)**
Connect the ground cord of the turntable here (except for PL-J210).

**⑨ TURNTABLE (DC 12V OUTPUT) jack**
This jack supplies power to the turntable PL-J210.
Connect the power supply cord of the turntable to this jack.

## FRONT PANEL FACILITIES

### Tuner: F-J210

① **Display section**
Shows current time, received frequency, contents of timer settings, etc.




Ⓐ **Deck II REC TIME indicator**
Lights when deck II is recording.

Ⓑ **Timer indicators**
WAKE-UP 1 2 : Lights when WAKE-UP 1 or 2 is set.
SLEEP : Lights when the SLEEP timer is set.
REC : Lights when the timer recording is set.
TIMER : Lights during timer recording.

Ⓒ **LOCAL indicator**
Lights when the LOCAL button is set to ON.

Ⓓ **TUNED indicator**
Lights when a broadcast is received and tuned in well.

Ⓔ **STEREO indicator**
Lights when an FM stereo broadcast is received (FM MONO button set to OFF).

Ⓕ **Time display**
This shows the present time and during recording, it shows the elapsed recording time. Further, once a radio station has been selected, the corresponding STATION CALL number will always be displayed, regardless of the listening source selected. The time display is shown when the standby mode or timer set mode is selected.

Ⓖ **MONO indicator**
Lights when the FM MONO button is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

Ⓗ **Frequency display**
Shows received broadcast frequency. Also gives scrolling display of main function status.
FM and MHz light: FM reception.
AM and kHz light: AM reception.

*NOTE:*
*The elapsed recording time might not be displayed due to noise from the power supply caused by improper timing when connecting the power cord. In such a case, disconnect the power cord and connect it again.*

② **BAND selector button**
Each time this button is pressed, FM or AM reception is selected alternately.

③ **FREQ./STATION button**
Use to select the display mode (frequency mode or station mode).
- **Frequency mode:** Display indicates the frequency of the tuned station, and the current time.
- **Station mode:** Display indicates the frequency of the tuned station together with the recorded station number assigned to that station.

④ **MEMORY SCAN button**
Use when you wish to scan the radio stations stored in the memory. Each station will be received for about five seconds before moving automatically to the next station.

⑤ **CLOCK ADJUST button**
Used for starting the clock adjustment.

⑥ **SET button**
Used for current time, timer playback, and timer recording setting.

⑦ **TIMER selector buttons**
WAKE-UP: Used for timer playback setting. Each time this button is pressed, WAKE-UP 1 or WAKE-UP 2 is selected alternately.
REC : Used for timer recording setting.

⑧ **LOCAL button**
Use this if the broadcast signal is too strong, causing noise and distortion. The attenuator reduces the strength of the signal, reducing noise and distortion.

⑨ **FM MONO button**
Turn on when there is much noise during reception of FM stereo broadcasts. The reproduced sound will become monaural but noise will be reduced.

⑩ **STATION MEMORY button**
Used for memorizing stations.

⑪ **TUNING – (DOWN)/+ (UP) buttons**

**[During tuning]**
Used for locating stations.
Use "–" button for lower, and "+" button for higher station number frequencies.

**[During time and timer setting]**
Used for adjusting the clock, timer settings and its related adjustments.

## ■ Cassette deck section

① **Deck I eject button ( ≜ )**

② **Deck I cassette door**

③ **Deck I operation buttons**

► (Play) : For playing back a tape in the forward mode.

◄ (Play) : For playing back a tape in the reverse mode.

■ (Stop) : For stopping the tape.

►► (Fast): Fast forward in forward mode, rewind in reverse mode.
Music search (MS) starts if this is pressed during playback.

◄◄ (Fast): Rewind in forward mode, fast forward in reverse mode.
Music search (MS) starts if this is pressed during playback.

④ **DOLBY* NR switch**

Set this switch to the ON position to activate the DOLBY NR system.

- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded with Dolby B type NR be so marked on the label. This will help prevent incorrect setting of the noise reduction switch during playback.

*

- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.*

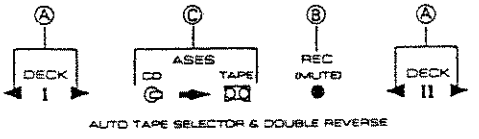
⑤ **ASES button (See page 22)**

Used for automatically recording a CD on cassette tape.

*NOTE:*

- *FINE is the mode when performing CD player EDIT (Computer Allocated Program Editing).*
- *The NORMAL mode provides a blank space of about five seconds between songs.*

⑥ **Operation indicators**




AUTO TAPE SELECTOR & DOUBLE REVERSE

Ⓐ **Direction (◄, ►):** Indicates direction of tape travel during recording or playback. Flashes slowly in Pause mode. Flashes rapidly during Music Search (MS).

Ⓑ **REC (MUTE):** Lights when recording. It flashes during tape copying.

Ⓒ **ASES:** Lights during the A.S.E.S. mode.

⑦ **PHONES (Headphones) jack**

For stereo headphones.

*NOTE:*

*There is no output from the speakers when headphones are plugged into PHONES jack.*

⑧ **MIC (Microphone) jack**

This is a standard jack for connecting a microphone.

⑨ **MIC LEVEL control**

Used for adjusting the volume of microphone.

⑩ **COPY buttons**

Used for tape copying. To select normal speed, press the recording pause button (●II) followed by the HIGH SPEED button.

**HIGH SPEED:** Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

**NORMAL** : Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.

⑪ **Deck II control buttons**

● II **(Rec pause):** When pressed once, sets unit to recording pause mode. The REC indicator lights and the direction indicators (◄ and ►) flash. Recording begins when you press the play button (◄ or ►).
When pressed while the tape is traveling, the unit will enter the pause mode.

O **(Mute)** : Used for creating a blank space between songs.

⑫ **Deck II operation buttons**

Same as Deck I operation buttons ③.

⑬ **Deck II cassette door**

⑭ **Deck II eject button ( ≜ )**

## Turntable: PL-J210

① **Platter mat**

② **Platter spindle**

③ **EP adaptor**

Place over the spindle to play 45 rpm singles.

④ **Dust cover**

⑤ **SPEED switch**

Set this switch in accordance with the speed of the record.

**33:** For 33-1/3 rpm records.

**45:** For 45 rpm records.

⑥ **ARM ELEVATION switch**

- To suspend record play temporarily
- For changing the tracks during actual play.

**UP** : The tonearm rises (the stylus moves away from the record.)

**DOWN:** The tonearm descends (the stylus is lowered onto the record.)

⑦ **STOP (■) button**

Press this button to stop play.

⑧ **Platter**

⑨ **Cartridge**

⑩ **Tonearm**

⑪ **Armrest**

# HOW TO HANDLE CASSETTE TAPES

## Bear in mind the following points before loading cassette tapes.

### Is the tape loose, or is some of the tape outside the cassette?

If some of the tape is projecting outside the cassette shell or if it is loose, it may not feed between the capstan and pinch roller. This will prevent the tape from being transported or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack (Fig. A). Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after having used the cassette.

### How can you prevent accidental erasure?

A cassette is provided with accidental erasure prevention tabs so that important recordings will not be erased accidentally. When the tab (Fig. B) on the cassette shell is broken out with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the recording pause (●II) button, so valuable recordings will not be erased in error.

To rerecord on a cassette whose tabs have been broken out, simply stick a piece of doubled adhesive tape over the tab areas, as shown in Fig. C.

*NOTE:*

*The accidental erasure prevention tabs are located at the top left on both sides A and B (1 and 2), so that material on each side can be prevented from being erased in error.*

### Tips on using cassette tapes

- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approx. 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack.
  Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.
  Use tapes of 90 minutes or less.

Fig. A
How to take up tape slack.

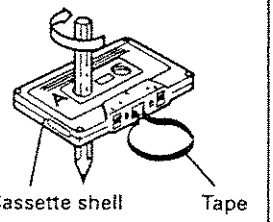



Fig. B
How to prevent already recorded tapes from being erased.

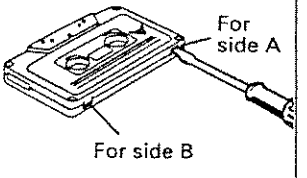
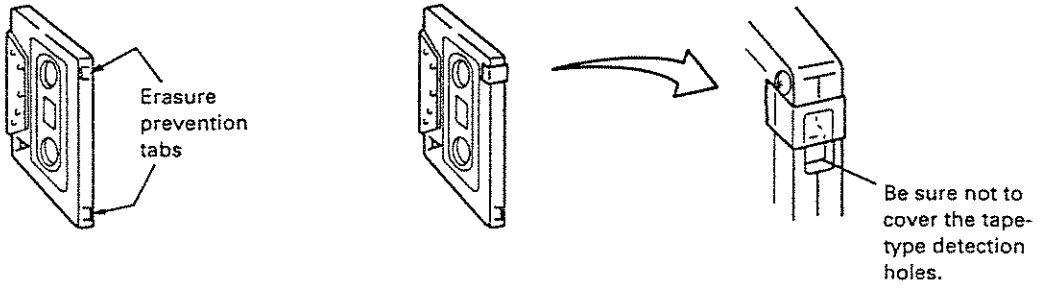
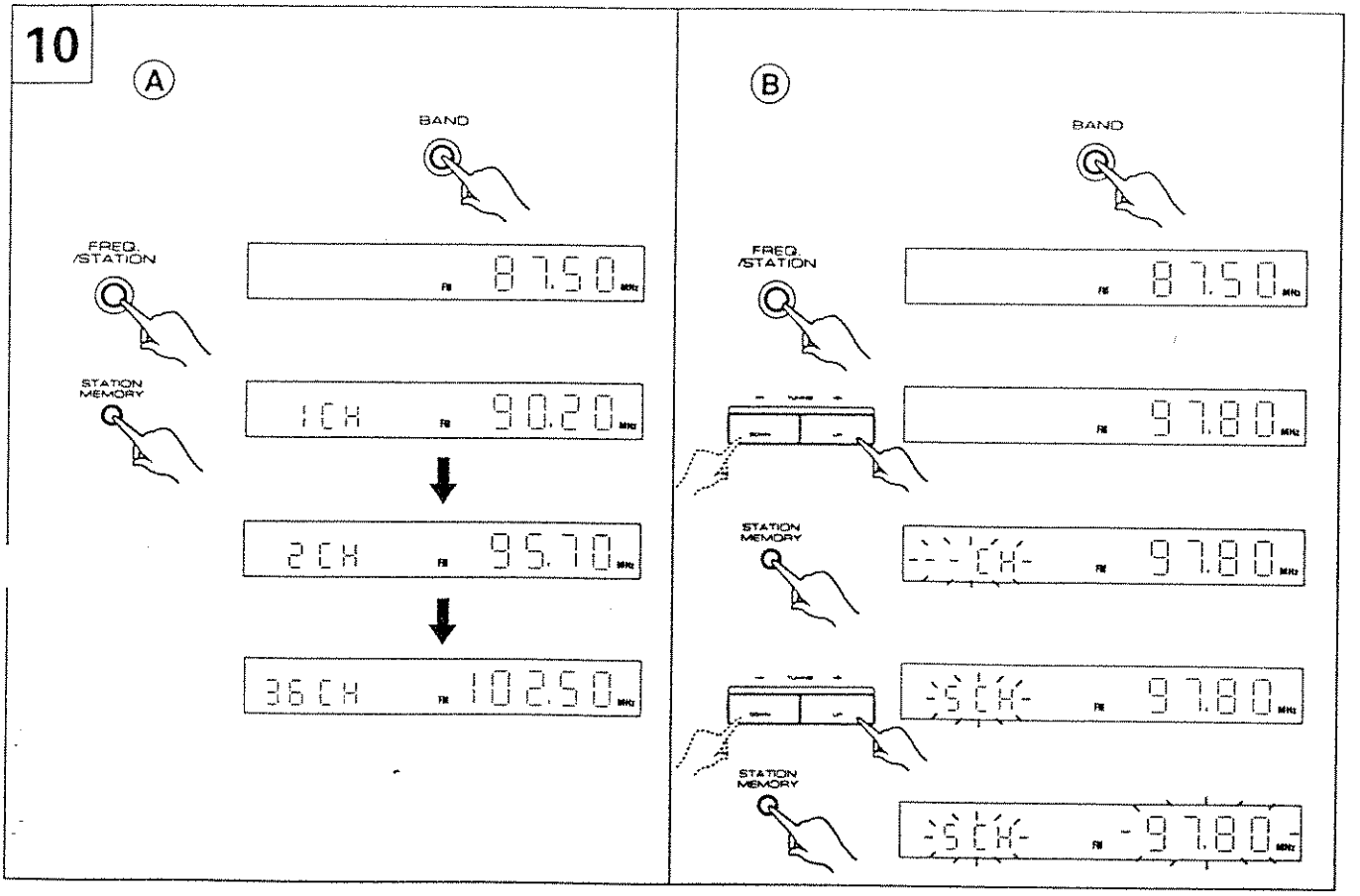



Fig. C

When you want to record again on a cassette with broken erasure prevention tabs, cover the tab sections with a double layer of adhesive or other tape.




With TYPE II (HIGH/$CrO_2$) tape, be sure not to cover the tape-type detection holes. If they are covered, the auto tape selector function will not operate correctly.




## MEMORIZING STATIONS (Tuner operation)

(See Fig. 10)

### Ⓐ Auto presetting

Up to 36 FM/AM stations can be automatically memorized.

1. **Select AM or FM with the BAND button.**
2. **Use the FREQ./STATION button to select frequency mode.**
3. **Keep the STATION MEMORY button pressed for more than 5 seconds.**
   Auto presetting starts from the current station.
   The reception frequencies are scanned for receivable stations and they are automatically stored in the station memory from 1CH in sequence.

*NOTE:*

- *To cancel the auto presetting operation, press the BAND button, TUNING "–" or "+" button.*
- *When either the LOCAL or FM MONO button is in its ON position, the button's function will automatically be turned off before the unit begins the auto memory function.*

### Ⓑ Manual presetting

- Up to 36 FM/AM stations can be memorized at random.

1. **Select AM or FM with the BAND button.**
2. **Press the FREQ./STATION button to select frequency mode.**
3. **Tune in the desired station with the TUNING "–" or "+" button.**
4. **Press the STATION MEMORY button.**
   "–CH" appears on the display.
5. **Select the station number to be memorized with the TUNING "–" or "+" button.**
   Operate while the display is flashing (it flashes for approx. 5 seconds).
6. **Press the STATION MEMORY button.**
   Operate while the display is flashing (it flashes for approx. 5 seconds).
   The displayed frequency is stored in the selected station No. Repeat steps 2 through 6 to memorize up to 36 stations.

*NOTE:*

*When an FM station is stored in memory, the ON/OFF status of the LOCAL and FM MONO buttons is simultaneously stored with the station.*

## RECORDING ONTO A CASSETTE TAPE (Cassette deck operation)

Material can be recorded on Deck II only. Recording is not possible on Deck I. You can make a recording of source which has passed through the graphic equalizer.

1. **Press the eject button (≜), and load the cassette tape for recording into deck II.**
   - Check to see that the accidental erasure prevention tabs are not broken off.
   - Make sure that there is no tape slack.
2. **Set the DOLBY NR switch to the desired position.**
   - A tape which has been recorded using the DOLBY NR system must be played back with the same system.
3. **Use the FUNCTION button on the amplifier to select the recording source.**

| Program source | Selected indicator | Operation |
|---|---|---|
| Record | PHONO | Operate the turntable |
| Radio broadcast | TUNER | Tune into a broadcast |
| Compact disc | CD | Play a compact disc |
| Equipment which is connected to VCR jacks | VCR | Operate the equipment connected to VCR jacks |

4. **Create your own original sound with the graphic equalizer (See page 18).**
5. **Press the recording pause button (●II).**
   - The REC indicator lights.
   - The direction indicator flashes.
6. **Press the appropriate play button (► or ◄).**
   - When you start recording with the ► button, at the end of the cassette tape, recording automatically continues in the ◄ direction (both-side recording).
   - When you start recording with the ◄ button, recording stops at the end of the cassette tape.
7. **Play the recording source.**
8. **To stop recording, press the stop button (■).**

### Auto reverse function

This unit uses rotary type recording and playback heads, and the same heads are used in both forward and reverse directions. Tape-end detection is employed to activate auto reverse operation which takes approx. 2 seconds after the tape is taken up.

*NOTE:*
*A leader tape having a length equivalent to approx. 5 seconds is attached to an ordinary cassette tape. This means that for two-way travel of the leader tape there will be a break of approx. 12 seconds in the sound. Be very careful of this, particularly when making a two-way recording.*

### Pausing and restarting recording

1. **Press the recording pause button (●II).**
   - Recording will be suspended.
2. **To restart recording, press the play button (► or ◄).**

### Recording muting

Use this function to create the 4-second blanks required for the music search operation.

- Press the mute button (O) during recording, and the unit will stop recording sound on the tape for about 4 seconds and will enter the recording pause mode.
- To create a blank more than 4 seconds long, hold the button down for the desired time. The unit will enter the recording pause mode when you release the button.
- To resume recording, press the play button.

## DOLBY NR SYSTEM

The Dolby NR System is designed to reduce high-frequency noise (tape hiss) generated during playback. The level of low-volume, high-frequency sounds is increased during recording, and decreased by the same amount during playback to restore the original level. At the same time, high-frequency noise (the most easily perceived by the human ear) is attenuated as well. Dolby NR reduces high-frequency tape noise, widening the dynamic range.
For playback always use the same Dolby NR setting that was used for recording.

*NOTE:*
*Avoid playing back tapes recorded using the Dolby NR System with DOLBY NR OFF, or tapes recorded without Dolby NR System with DOLBY NR ON, since this does not allow faithful reproduction of the original sound.*

## RECORD PLAY (Turntable PL-J210)

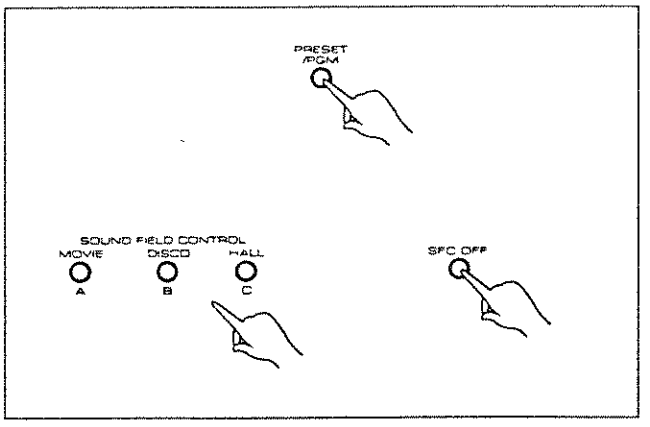
1. **Set the FUNCTION button on the amplifier to PHONO.**
2. **Place record on the platter mat.**
3. **Remove the stylus cover and release the tonearm from the armrest.**
4. **Set the SPEED switch.**
5. **Set the ARM ELEVATION switch to UP position.**
6. **Move the tonearm by hand to the desired position over the record.**
7. **Set the ARM ELEVATION switch to DOWN position.**
   - The tonearm descends onto the record and playback starts.
8. **Adjust the volume with VOL. (Volume) control on the amplifier.**
9. **To stop the player while a record is being played, press the STOP button.**

## PLAYING THE COMPONENTS CONNECTED TO VCR JACKS

1. **Set FUNCTION button on the double deck amplifier to VCR.**
2. **Play the component to be used.**

# SOUND FIELD CONTROL

## SELECTING A PRESET SOUND FIELD SETTING



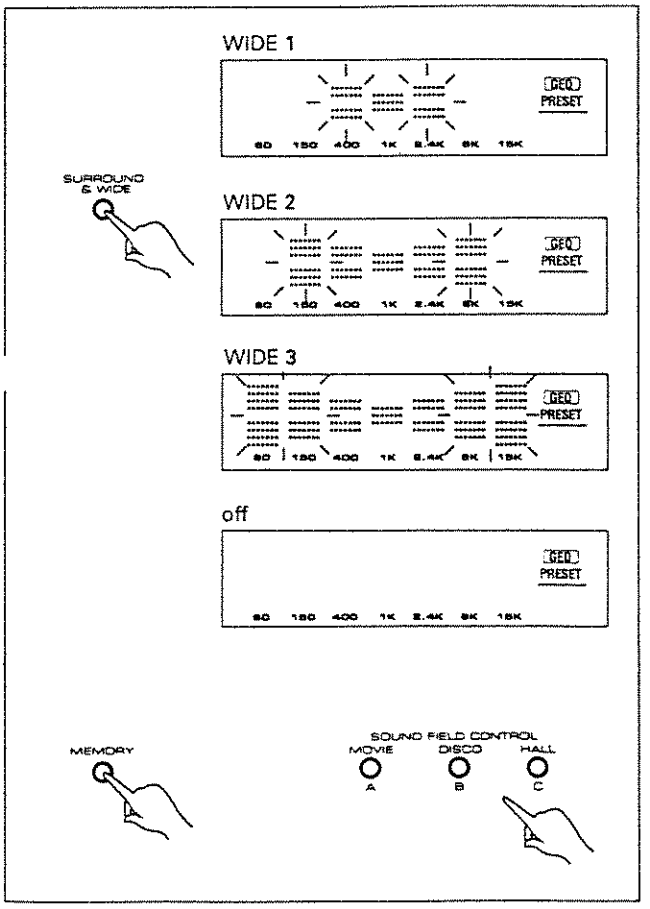

1. **Press the PRESET/PGM button to select PRESET.**
   The line under PRESET lights.
2. **Select one of the three settings with the SOUND FIELD CONTROL buttons.**
   MOVIE/A: Naturally reproduces conversations and sound effects, and provides wide and dynamic acoustics.
   This is effective for movies.
   DISCO/B: This boosts bass and treble to deliver a powerful, more dynamic sound.
   HALL/C: Provides a reverberation effect like that produced in a concert hall.
   The SFC and SURROUND & WIDE indicators light.
   The GEQ and desired preset sound field control indicators (A, B or C) light.

**To clear SOUND FIELD CONTROL settings:**
Press SFC OFF button.

## PROGRAMMING YOUR OWN SOUND FIELD SETTINGS INTO MEMORY

You can program up to 3 of your original sound field control settings into memory.

### Using the memory




1. **Adjust to achieve your desired sound with the graphic equalizer (refer to GRAPHIC EQUALIZER CONTROL on page 18).**
2. **Select your desired expansive sound field with the SURROUND & WIDE button.**
   Each time the SURROUND & WIDE button is pressed, the setting of the SURROUND & WIDE mode changes in the following sequence:
   → WIDE 1 → WIDE 2 → WIDE 3 → off ←

**WIDE 1:**
Creates more expansive sound field compared with the normal sound field.

**WIDE 2:**
Creates more expansive sound field compared with WIDE 1.

**WIDE 3:**
Create more expansive sound field compared with WIDE 2.

3. **Press the MEMORY button.**
   - The line under PROGRAM in the display section lights.
4. **Press the SOUND FIELD CONTROL button (A, B or C) you want to use for programming.**
5. **Repeat procedures 1 to 4 to program into memory with other SOUND FIELD CONTROL buttons.**

### Recalling settings from memory

1. **Press the PRESET/PGM button, and select PROGRAM.**
   - The line under PROGRAM in the display section lights.
2. **Press the SOUND FIELD CONTROL button (A, B or C) for the memorized setting that you wish to recall.**

**To clear SOUND FIELD CONTROL settings:**
Press SFC OFF button.

## CASSETTE TAPE RELAY PLAYBACK

- When there are cassette tapes in both Deck I and Deck II, relay play from Deck I to Deck II is possible.
- Relay playback is switched in the following order:

Deck I forward play (►) → Deck I reverse play (◄)

Deck II reverse play (◄) ←Deck II forward play (►)

  - If there is a cassette tape in only one of the decks, then it will be played continuously on both sides.

1. **Load the playback cassette tapes into Deck I and Deck II.**
2. **Set the DOLBY NR switch to the same position used for recording.**
3. **Press the appropriate play button (► or ◄) on Deck I.**
4. **To stop relay playback, press the stop button (■) of the operating deck.**

## MUSIC SEARCH

You can perform music search during playback by carrying out the following:

- **To listen to the following program, press the fast button (►►) of the same direction as playback.**
- **To listen to the current program again, press the fast button (◄◄) of the opposite direction to playback.**

During Music Search the indicator for tape travel direction flashes. When doing music search, do not operate the other deck. Doing so may affect blank interval detection function. When the unrecorded portion between the two programs is located playback resumes.

*NOTE:*

*Performing Music Search on the following types of cassette tape may not be possible. This is not a unit malfunction, however.*

- *A cassette tape whose unrecorded portions between tracks are less than 4 seconds long.*
- *A cassette tape with high noise level between tracks.*
- *A cassette tape with low level or silent passages of several seconds in the same tracks, such as classical music.*
- *A cassette tape, such as a conversation tape where sound is intermittent.*

## COPYING CASSETTE TAPES

Duplicating the recorded contents of one cassette tape onto another cassette tape is known as tape copying. The contents of the cassette tape in Deck I can be copied onto the cassette tape in Deck II (but not vice versa.) Copying is not possible while either deck is operating. You cannot record a source using the GRAPHIC EQUALIZER.

If a cassette tape recorded with the DOLBY NR system is copied, the copied cassette tape will also be recorded automatically with DOLBY NR system. If a cassette tape recorded without the DOLBY NR system is copied, the copied cassette tape will also be recorded automatically without the DOLBY NR system.

1. **Load the recorded cassette tape into Deck I and the cassette tape for recording into Deck II.**
   - Wind the cassette tape forward past the leader to the start of the magnetic coating portion.
   - Tape copying begins from the forward direction (►).
   - Both sides are copied from Deck I to Deck II.
   - Make sure there is no tape slack.
2. **To perform a normal copy while listening to the playback, set the FUNCTION button on the amplifier to TAPE and select the DOLBY NR switch position.**

Even if the FUNCTION button is set to another position, cassette tape copying will still proceed. The sound of the program source selected by the FUNCTION button will be heard through the speakers.

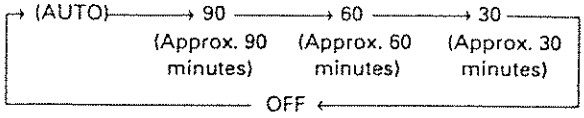
3. **Begin tape copying.**
   For NORMAL COPY: Press the recording pause button (●II) followed by the HIGH SPEED button.
   For HIGH SPEED COPY: Press the HIGH SPEED button.
4. **Press the stop button (■) on either deck to stop the copying at any time.**

*NOTE:*

- *If you are using a TV in the vicinity of the unit, noise will be recorded.*
  *Either switch off the TV or move it away from the unit.*
- *There is variation in actual tape length even among cassettes of the same length label (C-60, C-90, etc.). Therefore, even if the recording tape is labeled as the same length as the playback tape, it is possible for the recording tape to end first without recording all of the contents of the playback cassette tape.*

## SLEEP TIMER – Automatically turns off power.

Sleep timer can be activated by remote control unit only. Power is turned off automatically after your set time has elapsed.
Each time you press the SLEEP button, the setting changes in the sequence shown here.




During CD play, and tape recording and playback, if you press the SLEEP button and select "AUTO", power to the unit is automatically switched off when recording and playback have finished.
During relay playback, power is switched off when playback has finished on one deck.

- During SLEEP operation, if you press the SLEEP button twice, sleep timer remaining time is displayed. If you press it once more, sleep timer time settings change.

### [To activate the timer]

Select 1 or 2 with the WAKE-UP button. If the power is ON, switch it OFF.

*NOTE:*
*When timer playback has been selected, if everything is not set appropriately (for example, if there's no CD in the disc tray, no cassette tape loaded in the deck, or if the TUNED indicator is not lit for the received frequency), the audio input selector searches for and automatically switches to another source that will provide sound. If there is no other source, operation stops.*

## TO CHANGE TIMER SETTING

Input the new setting, beginning with the first step.

## IF YOU MAKE A MISTAKE WHILE SETTING THE TIMER

Complete the entire process first, then input correctly from the beginning.

## TURNING TIMER ON AND OFF

After inputting the timer setting, check the tuner display to confirm which timer is set to ON. The timer whose indicator is lighted (WAKE-UP 1 or 2) will be activated. Note that when the WAKE-UP button is pressed and the indicator is off, the timer will not operate. The timer can be reactivated by pressing the WAKE-UP button, as the setting is stored in the memory.

## TO CHECK THE TIMER SETTINGS

1. **Press the SET button.**
2. **Select 1 or 2 with the WAKE-UP button. After about five seconds, settings are displayed.**

## ABOUT THE SNOOZE FUNCTION

After TIMER PLAYBACK starts, you can turn the power temporarily off by pressing the SNOOZE button of the remote control unit. The power will be turned to ON again after approximately 5 minutes.

*NOTE:*
*If the remaining time for TIMER PLAYBACK is less than 5 minutes, the power will remain off and playback will not resume after 5 minutes even if the SNOOZE button is pressed.*

## TO CHANGE TIMER RECORDING SETTINGS

Input the new setting beginning with the first step.

## IF YOU MAKE A MISTAKE WHILE SETTING THE TIMER

Complete the process first, then input correctly from the beginning.

## TURNING THE TIMER ON AND OFF

Confirm that TIMER REC indicator is lighted on the display section. Note that the TIMER RECORDING mode is valid only for one recording. You can reactivate the timer by pressing the timer REC button (the REC indicator lights) again, as the setting is stored in the memory.

## TO CHECK THE TIMER SETTINGS

1. **Press the SET button.**
2. **Press the timer REC button within 5 seconds.**
   After about 5 seconds, the check mode will automatically display the timer contents.

## TIMER SETTING PRIORITY

- If more than one timer is set, and their operation times are overlapping, the timer with the earlier starting time has priority. The other timer(s) will not be activated.
- If more than one timer is set and their starting time has been set at the same time, they will be activated in the sequence of REC, WAKE-UP 1 and WAKE-UP 2.
- If the OFF time of the SLEEP timer is set within the operating time of one or more additional timer, the SLEEP timer has priority.
- When setting the wake-up timer and recording timer to run sequentially, be sure that at least one minute interval is allowed between the two function settings.

# TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

## Cassette deck amplifier

| Symptom | Cause | Remedy |
|---|---|---|
| **Power switch is on but power does not turn on.** | • AC cord is unplugged. | • Plug power cord into wall socket. |
| **No sound from speakers.** | • Volume is turned all the way down.<br>• Speaker cords are disconnected.<br>• Speaker cords are connected with vinyl insulation still on.<br>• Your desired listening source is not selected with FUNCTION button.<br>• Connection cords are not connected or are damaged. | • Raise volume knob setting.<br>• Connect speaker cords correctly.<br>• Strip vinyl insulation from speaker wire tips before connecting.<br>• Select correct listening source with FUNCTION button.<br>• Connect correctly or replace with good quality cords. |
| **Sound from only one speaker.** | • One of the speaker cords is disconnected or damaged. | • Connect correctly or replace with good quality cord. |
| **Screeching or howling sound heard during mic mixing.** | • Microphone angle is bad.<br>• Microphone is too close to speaker.<br>• Volume is too loud. | • Change microphone angle.<br>• Move microphone further away from speakers.<br>• Reduce volume. |
| **Cassette tape does not move.** | • Deck is in pause mode.<br>• Cassette inserted incorrectly. | • Press the recording pause (●II) or play (►) button.<br>• Put cassette properly in holder. |
| **No sound heard from cassette tape.** | • The listening source is not selected to TAPE with FUNCTION button.<br>• Playing unrecorded tape. | • Select to TAPE.<br>• Play a recorded tape. |
| **Tape sounds unclear, not loud enough.** | • Dirty head. | • Clean head. |
| **Cannot record.** | • Erasure prevention tabs are broken off.<br>• Dirty head. | • Apply adhesive tape over tab holes.<br>• Clean head. |
| **Cannot copy tape.** | • One deck has no cassette tape loaded.<br>• Tape in Deck II has erasure prevention tabs broken off. | • Load cassette tapes in both decks.<br>• Use cassette that can be recorded on. |
| **Treble tones unclear.** | • Dirty head.<br>• DOLBY NR system is ON when listening to a tape recorded without DOLBY NR. | • Clean head.<br>• Use same noise reduction system for playback as for recording. (Do not play tapes recorded with different NR systems.) |
| **Treble tones too strong.** | • Cassette tape recorded with DOLBY NR but played without. | • Play in same condition as recording. (Turn on the DOLBY NR switch for recorded tapes with DOLBY NR.) |
| **Strange sounds heard (or recorded from) tape, CD, or radio.** | • TV is on.<br>• This unit is too close to TV. | • Turn off TV.<br>• Move TV away until interference stops.<br>• Copy using NORMAL instead of HIGH SPEED. |
| **Music Search does not work.** | • No 4-second space. | • Use tape with 4-second space between songs. |
| **CD Auto Function does not work.** | • Flat cable not connected. | • Securely connect flat cable. |

# SPECIFICATIONS

## Double deck amplifier: DC-J210/DC-J110

### Amplifier Section

[DC-J210]

**Continuously Average Power Output is 50 Watts* per channel, min., at 8 ohms from 40 Herz to 20,000 Herz, with no more than 5% ** total harmonic distortion.**

[DC-J110]

**Continuously Average Power Output is 25 Watts* per channel, min., at 8 ohms from 40 Herz to 20,000 Herz, with no more than 5% ** total harmonic distortion.**

- Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.

Music power (DIN)
- [DC-J210] ..... 105 W+105 W (1kHz, T.H.D. 1%, 8Ω)
- [DC-J110] ..... 82 W+82 W (1kHz, T.H.D. 1%, 8Ω)

Graphic equalizer frequency band .....60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz, ±7 dB

Total Harmonic Distortion
- [DC-J210] ..... No more than 0.2% (40 Hz to 20,000 Hz, 35 W, 8Ω)**
- [DC-J110] ..... No more than 0.2% (40 Hz to 20,000 Hz, 22.5 W, 8Ω)**

### Cassette Deck Section

Systems .....4 track, 2-channel stereo
Heads .....Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor .....DC servo 2 speed motor x 2
Wow and Flutter .....No more than 0.09% (W.PEAK)
Fast Winding Time .....Approximately 105 seconds (C-60 tape)

Frequency Response (-20 dB recording):
- TYPE I (Normal) tape .....35 Hz to 14,000 Hz ±6 dB
- TYPE II (HIGH/$CrO_2$) tape .....35 Hz to 15,000 Hz ±6 dB

Signal-to-Noise ratio
- Dolby NR OFF .....56 dB

Noise Reduction Effect
- Dolby B-type NR ON .....More than 5 dB (at 5 kHz)

### Furnished Parts

Operating Instructions .....1
Remote Control Unit .....1
Dry Cell Batteries ("AAA" (IEC R03/UM-4) .....2
Power cord .....1

### Miscellaneous

Power requirements
- Australian model .....AC 240 Volts-, 50/60 Hz
- Singapore model .....AC 110/120/220/240 V (switchable), 50/60 Hz
- Other models .....AC 110/120-127/220/240 V (switchable), 50/60 Hz

Power Consumption:
- [DC-J210] .....400 W
- [DC-J110] .....275 W

Dimensions ..... 360 (W) x 210 (H) x 344 (D) mm
Weight (without package)
- [DC-J210] .....9.5 kg
- [DC-J110] .....8 kg

## FM/AM digital synthesizer tuner: F-J210

### FM Tuner Section

Frequency range .....87.5 MHz to 108 MHz
Usable Sensitivity .....Mono: 12.8 dBf, IHF (1.2 µV/75Ω)
Sensitivity (DIN) .....Mono S/N 26 dB: 1 µV/75Ω
Stereo S/N 46 dB: 35 µV/75Ω
Signal-to-Noise Ratio (IHF, 85 dBf Input) .....Mono: 77dB
Signal-to-Noise Ratio (DIN) .....Mono: 66 dB
Stereo: 60 dB
Distortion .....Stereo: 0.5% (1kHz)
Antenna Input .....75Ω unbalanced

### AM Tuner Section

Frequency Range
- With 10 kHz step .....530 kHz to 1,700 kHz
- With 9 kHz step .....531 kHz to 1,602 kHz

Sensitivity (IHF, Loop antenna) .....350 µV/m
Antenna .....Loop Antenna

### Miscellaneous

Dimensions .....360 (W) x 80 (H) x 324 (D) mm
Weight (without package) .....2.2 kg

### Furnished Parts

FM antenna .....1
AM Loop Antenna .....1

## Auto return stereo turntable : PL-J210

### Motor, Platter

Motor Type .....DC servo motor
Drive Method .....belt drive
Speed .....33-1/3, 45 RPM
Wow and Flutter .....0.07% WRMS (JIS)
±0.10% WTD Peak (DIN)
Signal-to-Noise Ratio .....63 dB (DIN-B)
Platter .....295 mm dia., aluminum die-cast

### Tonearm

Type .....Dynamic balance type, straight tonearm

### Installed Cartridge

Type .....MM Type
Stylus .....0.6 mil diamond
Replacement Stylus .....PN-210
Output voltage .....2.5 mV (1 kHz, 5 cm/s, Lat. peak)
Tracking Force .....2.0-3.0 g (optimum 2.5 g)
Frequency Response .....20 Hz to 25,000 Hz
Load Resistance .....47 kΩ
Cartridge Weight .....4 g

### Miscellaneous

Dimensions .....360 (W) x 94 (H) x 364 (D) mm
Weight .....2.4 kg

### Accessories

EP Adaptor .....1

- *Specifications and design subject to possible modification without notice due to improvements.*

***Measured By Audio Spectrum Analyzer.*

**Information to User**
Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

**[For stereo double cassette deck amplifier]**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

## POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

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**PIONEER ELECTRONIC CORPORATION** 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
**PIONEER ELECTRONICS [USA] INC.** 2265 East 220th Street, Long Beach, California 90810, U.S.A.
P.O. BOX 1720, Long Beach, California 90801, U.S.A.
**PIONEER ELECTRONICS OF CANADA, INC.** 300 Allstate Parkway Markham, Ontario L3R 0P2, Canada
**PIONEER ELECTRONIC [EUROPE] N.V.** Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium, TEL: 03/750.05.11
**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.** 178-184 Boundary Road, Braeside, Victoria 3195, Australia, TEL: [03] 580-9911

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## Tuner

| Symptom | Cause | Remedy |
|---|---|---|
| **No reception** | • Antenna not connected.<br>• Wrong radio band.<br>• Station not tuned in.<br>• FUNCTION button not set to TUNER. | • Connect antenna correctly.<br>• Set to desired radio band.<br>• Tune in station.<br>• Set to TUNER. |
| **Beat noise heard.** | • TV is on.<br>• Loop antenna position bad. | • Turn off TV or move TV away.<br>• Change loop antenna position. |
| **Noise heard.** | • Interference from nearby fluorescent light, hair dryer, or other electrical appliance.<br>• Not tuned in correctly. | • Stop using device causing interference.<br>• Use tuner controls to tune in station. |
| **Sound is distorted.** | • Antenna in poor position.<br>• Broadcast is weak.<br>• Interference from other electrical devices or multipath reception. | • Change antenna position.<br>• Use external antenna.<br>• Change antenna position. |

## Remote Control Unit

| | | |
|---|---|---|
| **Remote control does not work.** | • Batteries are dead or no batteries in remote control unit.<br>• Poor angle or too great a distance from the remote sensor window.<br>• There is an obstacle between you and the remote sensor window.<br>• CD player, the remote control cord is not connected.<br>• A fluorescent light is shining on the remote sensor window. | • Insert new batteries.<br>• Use within 7 meters and within a 30 degree angle of the remote sensor window.<br>• Change your position or move the obstacle.<br>• Correctly connect the flat bacle.<br>• Turn off the light. |

## Clock and Timer

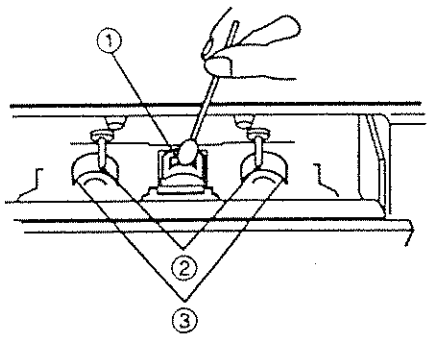
| | | |
|---|---|---|
| **No time indication.** | • There was a power blackout.<br>• AC plug was pulled. | • Set time again.<br>• Set time again. |
| **Timer does not work.** | • Current time is not set.<br>• Start time is not set.<br>• Timer is not on. | • Set current time.<br>• Set ON times.<br>• To use timer, press the timer selector button so that the timer display lights. |

## Turntable

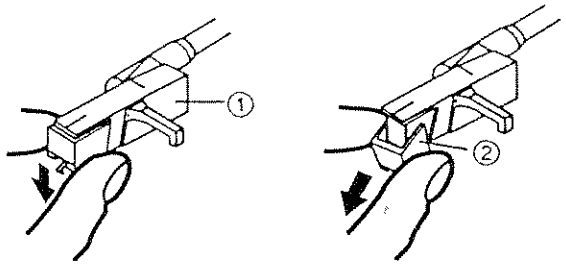
| | | |
|---|---|---|
| **Platter does not turn.** | • Belt is off. | • Put belt correctly on platter. |
| **No sound.** | • FUNCTION button not set to PHONO. | • Set to PHONO. |
| **Noise or scratchy sounds.** | • Dust on record.<br>• Scratch on record. | • Clean record.<br>• Use good record. |

*Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.*

11




12




## CLEANING THE HEAD SECTION

See Fig. 11

① Head ② Capstan ③ Pinch roller

The heads, capstan and pinch roller are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high frequency components of the sound will not be reproduced and the stereo balance will be impaired, resulting in a deterioration of sound quality. It is therefore recommended that the head section be cleaned regularly.

- Press the eject button (⏏) to open the cassette door.
- Dip a cleaning swab into head cleaning fluid and use it to wipe the head, capstan, and pinch rollers. Wait 2-3 minutes till cleaning fluid dries.

*NOTE:*

*This unit uses a head-slant standby system, with the result that the heads are mounted at an angled position.*

## DEMAGNETIZING THE HEAD

The recording/playback head becomes magnetized when you use the cassette deck for prolonged periods of time. This results in noise being generated and the treble dropping off during recording and playback. The recording/playback head should therefore be demagnetized regularly with a commonly sold head demagnetizer.

When demagnetizing the head, switch power ON to the cassette deck amplifier. **To avoid adversely affecting the cassette deck amplifier and speakers, be sure to set the volume level to 0. Also disconnect the headphone plug from the PHONES jack.**

For further details, refer to the operating instructions accompanying your head demagnetizer.

*NOTE:*

*Do not hold a screwdriver, metal objects or magnets close to the heads.*

## MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted 5 or 6 times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

## REPLACING THE STYLUS

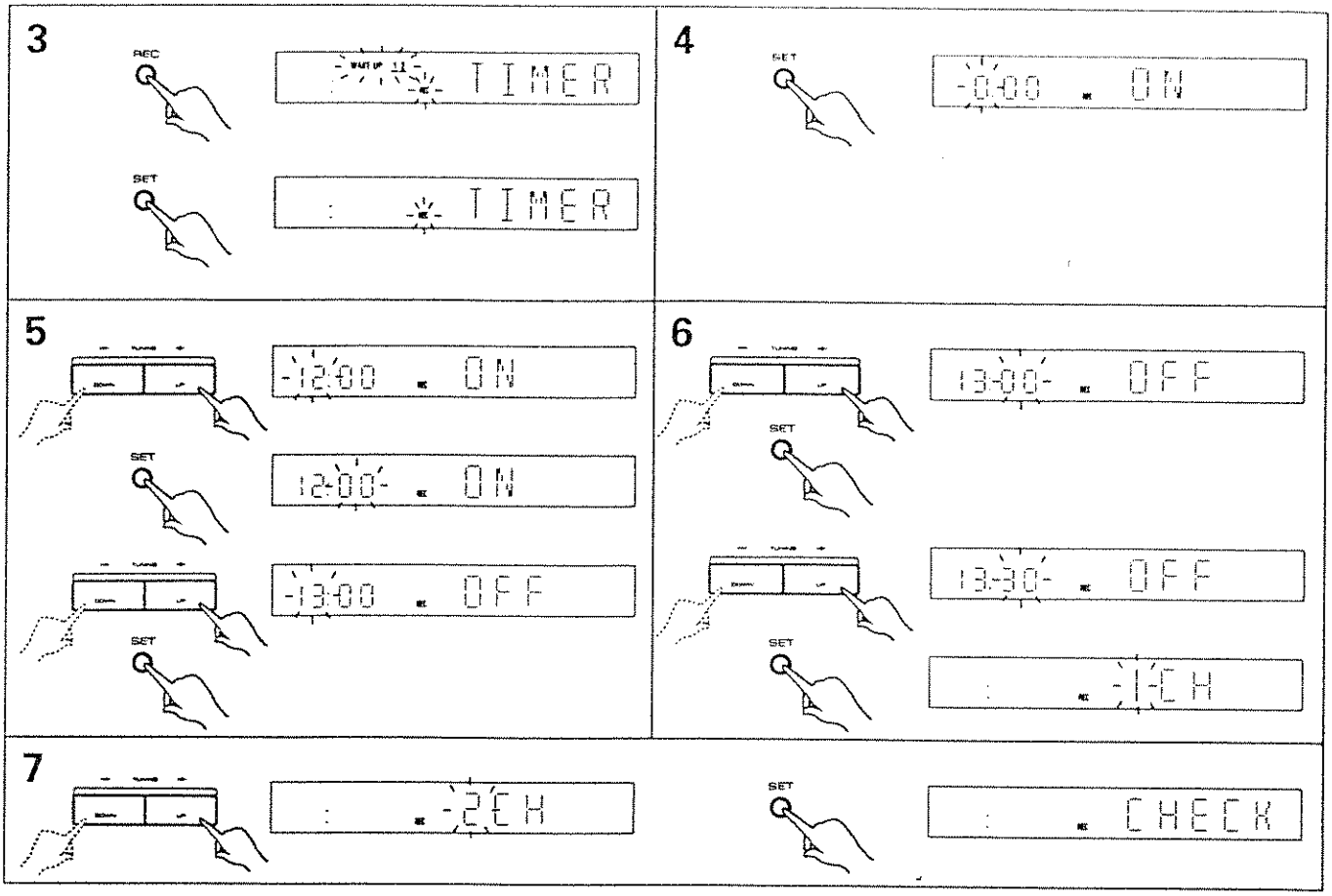
1. **Remove the stylus gently. (See Fig. 12.)**
2. **Attach the new stylus to the cartridge.**

① Cartridge ② Stylus

*NOTE:*

- *The service life of the stylus on the supplied cartridge ranges from 800 to 1,000 hours. (After about one year if you play records about two hours everyday. However, the stylus may need to be replaced earlier depending on the way it is used.)*
- *Using a worn or damaged stylus can damage your records and distort the sound reproduction. Remember to replace the stylus at the earliest possible date.*
- *Always use the PIONEER "PN-210" as a replacement stylus.*
- *Always ask for a genuine PIONEER replacement stylus.*

# TIMER RECORDING




- At the set time, an FM or AM station is recorded (enabling recording while you are out or asleep)
- Before performing timer recording, be sure to record the desired station in the station memory.
- Perform timer settings with power ON.
- Be sure not to set the volume too high.

*NOTE:*
*Make sure that the erasure prevention tabs of the cassette have not been removed.*

## OPERATION

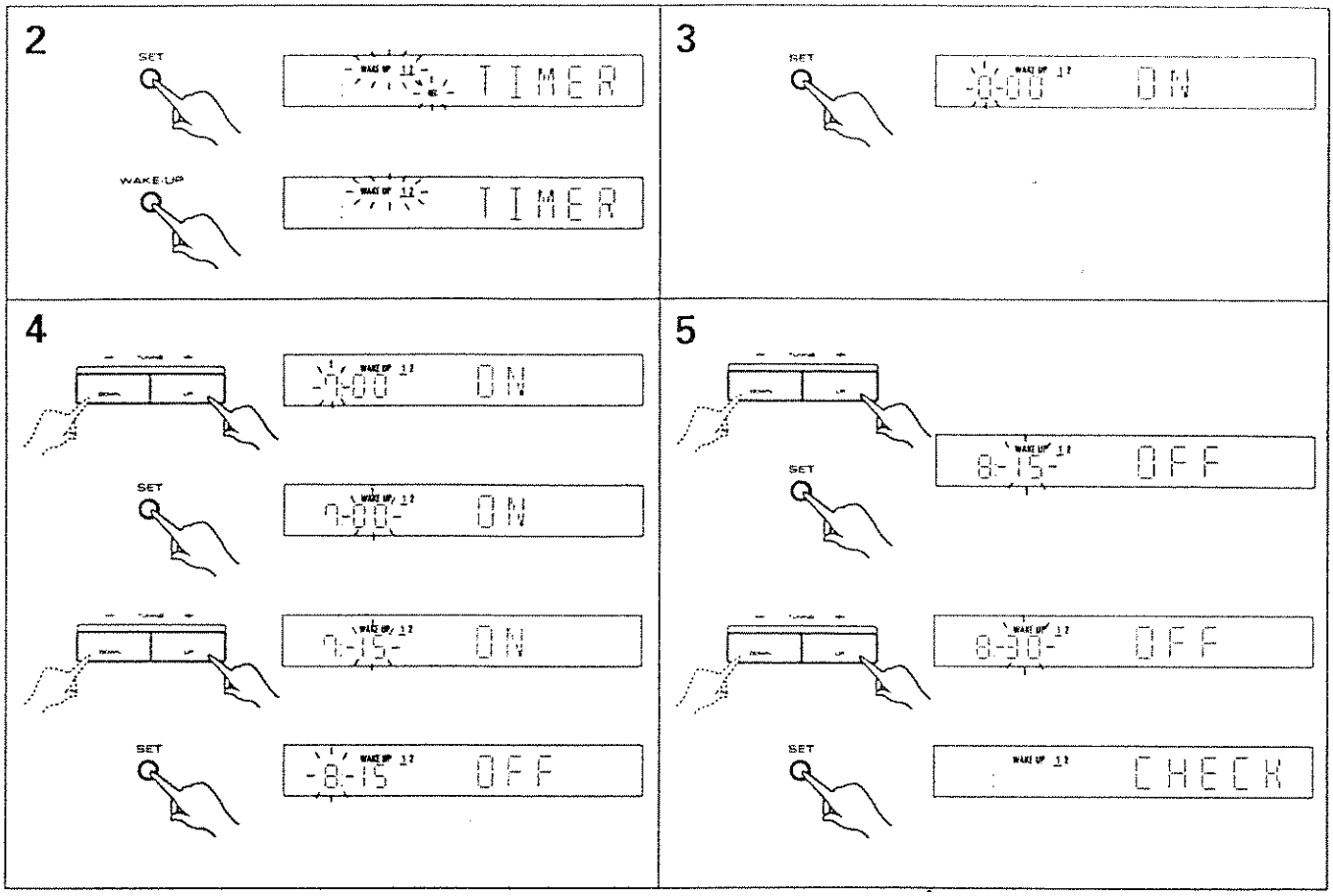
**Example:** To record the radio station stored in channel 2, beginning at 12 : 00 and ending at 13 : 30.

1. **Insert a cassette tape to be recorded into Deck II.**
   - Timer recording begins in the forward direction (►) so be careful which way you put in the tape.
2. **Set the DOLBY NR switch on the cassette deck to the position of your choice.**
3. **Press the SET button, then press the timer REC button.**
4. **Press the SET button within 5 seconds.**
5. **Set the ON time. Select the hour with the TUNING "–" or "+" buttons, and press the SET button. Select the minutes with the TUNING "–" or "+" buttons, and press the SET button.**
6. **Set the OFF time. Select the hour with the TUNING "–" or "+" buttons, and press the SET button. If you do not set the time for recording to stop, it is automatically set to stop after one hour.**
   **Select the minutes with the TUNING "–" or "+" buttons, and press the SET button.**
7. **Select the station call number (CH) you want to record with the TUNING "–" or "+" buttons, and press the SET button.**
   After showing the ON time, OFF time and station call number will be displayed. The tuner display will return to the normal display.

### [To activate the timer]

Press the timer REC button. If the power is ON, switch it OFF.

# TIMER PLAYBACK




- A compact disc, cassette, or a radio broadcast can be used as a morning alarm instead of an alarm clock.
- Be sure not to set the volume too high.
- Timer playback begins everyday at the same time as long as the timer playback mode is not turned off.
- To receive the desired station for TIMER PLAYBACK, set the frequency of the station to a channel and tune to that channel before setting the timer.
- Switch the function to the desired source for timer playback.
- Perform timer settings with power ON.

## OPERATION

**Example:** Set WAKE-UP 1 for timer playback from 7 : 15 to 8 : 30.

1. **Select the function for the desired source.**
   - **To listen to a CD ...**

   Switch the function to CD, and load a disc.
   - **To listen to the radio ...**

   Switch the function to TUNER, and recall a desired station with Station Call (page 16). Set other parameters such as volume level.
   - **Listening to a tape ...**

   Switch the function to TAPE, and load Deck I or Deck II with cassette tape. The deck starts playback in the forward direction (►). If cassette tapes are loaded in both Decks I and II, playback starts on Deck I.
2. **Press the SET button. Press the WAKE-UP button, and select 1 or 2.**

   The line under the selected number lights.
3. **Within 5 seconds, press the SET button and set the ON time.**
4. **Select the hour with the TUNING "–" or "+" buttons, and press the SET button. Select the minutes with the TUNING "–" or "+" buttons, and press the SET button.**
   - The display will automatically show a time one hour after the selected starting time.
5. **Set the OFF time. Select the hour with the TUNING "–" or "+" buttons, and press the SET button. Select the minutes with the TUNING "–" or "+" buttons, and press the SET button.**

   After showing the ON time, OFF time, and the selected function*, the tuner display will return to the normal display.

   * When tuner is selected, the frequency, station call number and band will be displayed.
   - If you do not set the stop time, it is automatically set for one hour after the start time.

# A.S.E.S. (Auto Synchro Editing System)

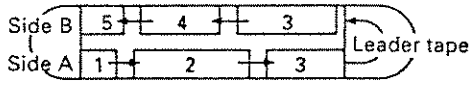
This function can be used with the Pioneer CD player PD-J210T or PD-J215M.
For automatic recording of a CD to a cassette tape. This unit offers two kinds of A.S.E.S. operation.

## A.S.E.S. OPERATION

- The numbers are the CD track numbers.

### NORMAL:

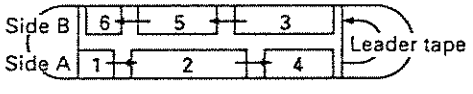
- If the recording is finished in the middle of a track at the end of side A, that track will be recorded from the beginning on side B.




- If the CD player section is operating in a programmed mode, then A.S.E.S. proceeds with the programmed track order.

### FINE:

- Before recording, the CD player calculates which tracks and how many will fit on your selected tape length (EDIT) to minimize empty end-of-tape space.




When recording starts in the forward direction (►) at the end of the cassette tape, the cassette tape reverses and recording resumes in the reverse (◄) direction.
In the A.S.E.S. modes, a silent passage about five seconds long is inserted between tracks during recording.

### [NORMAL]

1. **Put a disc in the CD player.**
   - With PD-J215M, put CDs in trays 1 and 2.
2. **Put a cassette tape to be recorded in Deck II.**
3. **Set the DOLBY NR switch to the desired position.**
4. **To record the sound passed through the graphic equalizer, turn on the GEQ ON/OFF button and adjust the sound quality.**
5. **Press the ASES button.**
   If tape remains, you can change CD and continue recording by using A.S.E.S.
   Perform 1-5, A.S.E.S. will finish temporarily.
6. **Change CD.**
7. **Press the recording pause button (●II).**
   - The Direction indicator part of the display will flash in the direction of tape travel and recording will begin in that direction.
8. **Press ASES button to start LINK A.S.E.S.**
   - Begin LINK A.S.E.S.
   - With LINK A.S.E.S. if the CD playing time is shorter than the tape:
     A.S.E.S. will finish in the recording pause condition. If you wish to continue and record a different CD, change CD and press the ASES button.
   - In the following situation, ASES will finish in the stop condition:
     - If the CD playing time is longer than the tape.
     - When CD is except for the AUTO EJECT mode. (PD-J210T)

### [FINE]

1. **Put disc in the CD player.**
   - With PD-J215M, put CDs in trays 1 and 2.
2. **Put a cassette tape to be recorded in Deck II.**
3. **Set the DOLBY NR switch to the desired position.**
4. **To record the sound passed through the graphic equalizer, turn on GEQ ON/OFF button and adjust the sound quality.**
5. **Press the EDIT button of the CD player.**
6. **Specify the recording time of the tape within 3 seconds, using the manual/track search button (►► ►►I) of the CD player.**
   → 46 → 54 → 60 → 74 → 90 → unit : min.
   Tape recording time will change in the above sequence whenever the button is pressed.
7. **Press the EDIT button of the CD player.**
   All the programmed tracks for tape sides A, B and the recording time will be displayed.
   If you want to see the contents of the program, press the EDIT button. The programmed tracks will be displayed in the programmed sequence.
8. **Press the ASES button.**
9. **To stop A.S.E.S. operation, press the stop button (■) of deck II or CD player.**

### <A.S.E.S operation>

① The cassette tape for recording is rewound to the beginning.
② Recording on the cassette tape begins in the forward direction.
③ Playback begins on the CD player.
④ When one side is recorded, recording on the cassette tape begins in the reverse direction.

If you stop A.S.E.S. operation part way through, press Deck II's or CD player's stop button (■).

*NOTE:*

- *A.S.E.S. performs automatic recording from CD to tape, so do not attempt to perform manual operations during A.S.E.S. operation.*
- *A.S.E.S. may stop or operate incorrectly when there is a song change near the end of the tape. In such cases use manual operation to record the remaining songs.*
- *Up to 18 tracks per disc with PD-J210T, 23 tracks per disc with PD-J215M.*
- *When the EDIT button is pressed for 3 continuous seconds, the tape length will be automatically selected. It will be selected from 46 min., 60 min., or 90 min.*

# MEMORIZING YOUR USUAL LISTENING SETTINGS (SMART OPERATION)

This function lets you recall your usual listening settings (usual operation switch and knob settings) at the push of a button.
Press the START/SET button, and the unit searches for an audio source that is ready to play, and automatically switches functions before starting playback from that source.
With PD-J215M, put CDs in trays 1 and 2.

## PROGRAMMING THE SETTING

1. **Select the appropriate settings to be stored.**
2. **Press the SMART OPERATION MEMORY button.**
3. **Press the START/SET button within 5 seconds.**

*NOTE:*
*Volume will be memorized at the setting that exists when memorization takes place. However, high volume settings above or near the center position cannot be memorized.*

## RECALLING THE MEMORY

1. **Set to play back from the source you want to listen to.**
   - If you have memorized TAPE in SMART OPERATION, load a cassette tape.
   - If you have memorized CD, load a CD in the CD tray.
2. **Press the START/SET button**
   - When playback with a memorized function is not possible (for example, when CD has been memorized and there is no CD in the tray), search for the next audio source and operate manually in the same way as before programming the memory.

*NOTE:*
*If no program source is set in the programmed function, the program will stop at that function.*

# MICROPHONE MIXING

Mixing involves combining the signals from two input sources (a microphone and a tape, for example).

## MIXING PROCEDURE

1. **Plug a microphone into MIC jack.**
2. **Adjust the VOL. (Volume) control to a suitable level.**
3. **Set the MIC LEVEL control to the center position between MIN and MAX.**
   - If howling occurs (a high-pitched sound from the speakers), take the following steps.
   1. Move the microphone away from the speakers.
   2. Lower the volume.
4. **Select the desired program source using FUNCTION selector button.**
5. **Start playback of the program source.**
6. **Adjust the VOL. (Volume) control.**
7. **Use the MIC LEVEL control to adjust the microphone level in relation to the music source.**
8. **Talk or sing into the microphone.**

## MIXING RECORDING

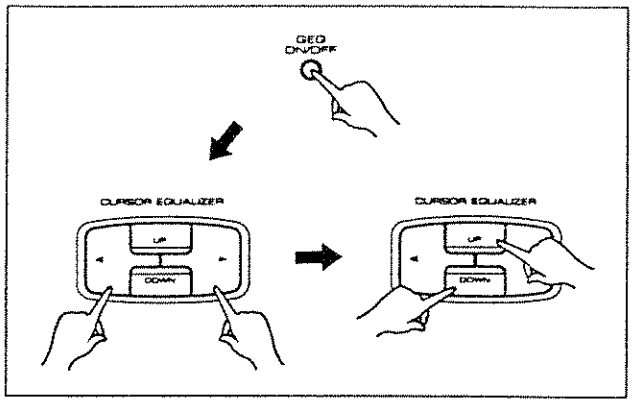
You can use the mixing feature to record together an input from a microphone and another source.

1. **Perform steps 1 to 7 in the section "MIXING PROCEDURE."**
2. **Load a cassette tape for recording into Deck II.**
3. **Press the recording pause button (●II) on Deck II.**
4. **Press the play button (► or ◄) on Deck II.**
5. **Sing along with the program source.**

*NOTE:*
*When microphone mixing while playing back on Deck I, mixing recording is not possible on Deck II.*

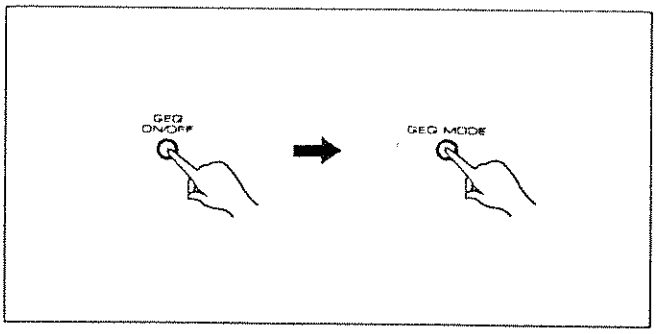
# GRAPHIC EQUALIZER CONTROL

## ADJUSTING SOUND QUALITY WITH THE GRAPHIC EQUALIZER




1. **Press the GEQ ON/OFF button to switch on.**
   - The GEQ indicator in the display section lights.
2. **Select a frequency with the ◄, ► CURSOR EQUALIZER buttons.**
   - With the ◄, ► buttons, move the "——" so that it is lit at the location of the frequency you want to adjust.
3. **Adjust the level of equalization with the CURSOR EQUALIZER UP, DOWN buttons.**
   - Press the UP button to increase the level of equalization. Press the DOWN button to decrease the level of equalization.
4. **Repeat procedures 2 and 3 to create your desired equalization pattern.**

## SELECTING A PRESET EQUALIZATION PATTERN




You can enjoy recalling the following five preset equalization patterns.

HEAVY/A: This pattern boosts high and low frequencies, for a louder, more powerful sound. It's ideal for rock and pop music, and live performances.

CLEAR/B: Ideal for fusion and electronic music, this pattern provides clear middles and highs.

VOCAL/C: When listening to opera or musicals, this preset boosts the vocals so you can hear them clearly.

CAR/D: This is a good equalization pattern to use when recording tapes for use on your car stereo.

HEADPHONES/E: This is a good equalization pattern to use when recording tape to listen to on headphones.

Use the CAR and HEADPHONES equalization patterns when recording tapes.

1. **Press the GEQ ON/OFF button to ON.**
   - The GEQ indicator in the display section lights.
2. **Select your desired equalization pattern with the GEQ MODE button.**
   Each time the GEQ MODE button is pressed, one of the preset equalization patterns is selected, in the following order:

   → A → B → C → D → E →
   off (flat) ←

   - Refer to GEQ MODE printed indications on the FRONT PANEL of cassette deck amplifier.
   - The line under PRESET and desired preset equalization indicator (A, B, C, D or E) in the display section light.

## RECEPTION USING PRESET TUNING (Tuner operation)

### Station call

1. **Press the FREQ./STATION button to select station mode.**
   Station No. appears in the display.
2. **Select the station No. you want to recall with the TUNING "–" or "+" button.**

*NOTES:*

- *The memorized stations will not be erased even if the power is turned off. However, if the AC power cord is unplugged or a power failure occurs, the memorized stations will be erased. (If the AC power cord is unplugged, the memorized stations will be preserved for several days.)*
- *If the memorized stations have been erased, memorize them again.*

### Scanning memorized stations

1. **Press the MEMORY SCAN button during station reception.**
   Each memorized station is tuned in for approx. 5 seconds. If the TUNED indicator does not light, the tuner will immediately move to receive the next station.
2. **Press the MEMORY SCAN button again as soon as the desired station is tuned in.**

### Last station memory

The last received AM and FM stations remain stored despite FUNCTION button and/or POWER switching. To recall, use the BAND button.

## CASSETTE TAPE PLAY (Cassette deck operation)

Cassette tapes may be played back in Deck I or Deck II but not in both decks at the same time.

1. **Press the eject button (≜), and load a recorded cassette tape.**
2. **Set the DOLBY NR switch to the same position used for recording.**
3. **Press the play button (► or ◄).**
   Press the play button of the loaded deck.
4. **Adjust the VOL. (Volume) control on the amplifier.**
5. **To stop playback, press the stop button (■).**

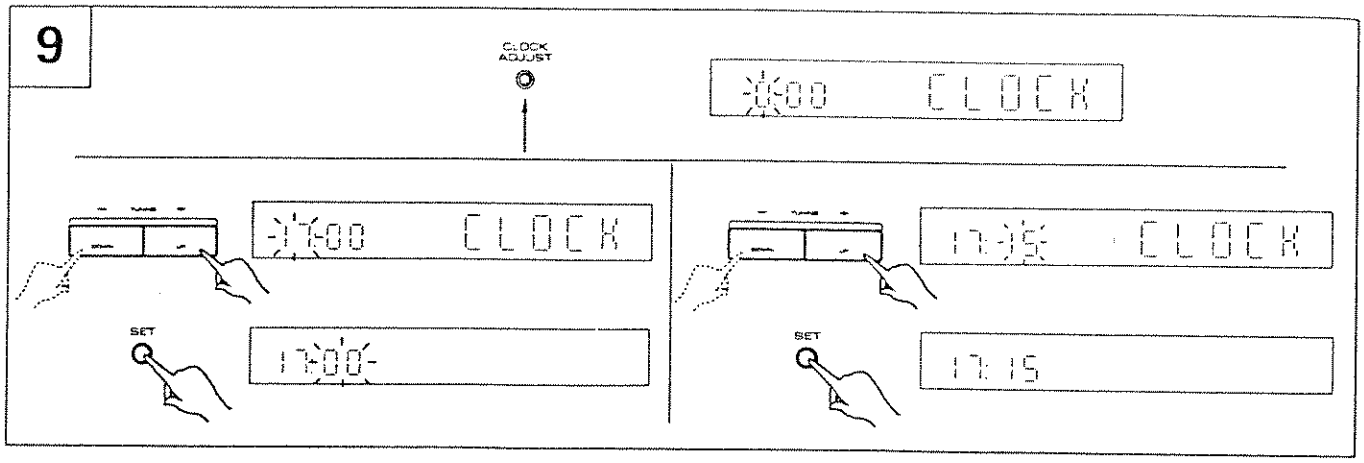
### Auto stop mechanism

- When a cassette tape is played back on Deck I or Deck II, play automatically stops after both sides of the tape have been played six times.
- If tapes are loaded in both Deck I and Deck II, after the cassette tape in Deck I has finished playing in the reverse direction (◄), playback begins in the forward direction (►) on Deck II (Relay Play). Playback automatically stops after the cassette tape in Deck II finishes playing in the reverse direction (◄).
- When recording, recording automatically stops when the cassette tape finishes recording in the reverse direction (◄).
- Load both Deck I and Deck II with cassette tapes, start playback (►) on Deck II, and playback will stop after the cassette tape finishes playing in both directions.

*NOTE:*

*When the play button of one deck is pressed while the other deck is in playback mode, the former stops and the latter starts playback.*

# BASIC OPERATIONS




## SETTING THE CLOCK (Tuner operation)

[Example]
Setting the time to 17:15. (See Fig. 9)

1. Press the CLOCK ADJUST button with the point of a pencil.
2. Use the TUNING "–" and "+" buttons to set the hour.
3. Press the SET button.
4. Use the TUNING "–" and "+" buttons to set the minutes.
5. Press the SET button when "00" seconds of that minute are reached for precise adjustment.

- After connecting to an AC outlet, be sure to set the present time.
  Timer playback and timer recording are not possible unless the time has been set.
- The time indication will appear as "--:--" if the AC power cord is unplugged. Be sure to set the time again after power is resumed.

## PREPARATION

Press POWER switch of the cassette deck amplifier. Select a program source with the FUNCTION button.

## AUTO FUNCTION

**When DC-J210, F-J210, PD-J210T (PD-J215M) and DC-J110, F-J210, PD-J210T (PD-J215M) are used together.**
This model is equipped with "auto function" operation, so when the button for playing CD, cassette tape, or tuner is pressed, the amplifier's function switches automatically.
Use the FUNCTION button for PHONO and VCR source selection since Auto Function is not effective for these.

*NOTE:*
*FUNCTION button cannot be switched during recording. (Auto function does not operate either.)*

## TUNING INTO STATIONS (Tuner operation)

1. Select the desired broadcasting band using the BAND button.
2. Press the FREQ./STATION button to select frequency mode.
3. Press the TUNING "–" or "+" button for higher or lower frequencies.

### [Auto tuning]

Press the TUNING "–" or "+" button until the frequency starts to change, then release it.
The tuner will automatically search for a broadcasting station, and stop when one is found, and the TUNED indicator lights up. To search for another station, press again.

- To interrupt auto tuning, press the TUNING (–/+) button again.

*NOTE:*
*When auto tuning is in use, reception may not be possible for distant stations or when signals are weak. At these times manual tuning is recommended.*

### [Manual tuning]

Press the TUNING "–" or "+" button and release quickly.
The tuning frequency will change by one step each time the button is pressed. Press as many times as necessary to tune in the desired station. The TUNED indicator lights up when the station is tuned in best.

- If you keep the TUNING (–/+) buttons pressed after the frequency has begun to change, the reception frequency changes continuously, and stops when the button is released.

3. Adjust the VOL. (volume) control on the amplifier section.

### FM stereo/monaural broadcast reception

When the FM MONO button is in the off position (MONO indicator is out), the STEREO indicator lights during reception of an FM stereo broadcast.
If the FM stereo broadcast signal is weak, with a lot of noise, press the FM MONO button and the MONO indicator lights. Reception will be monaural, but noise will be reduced.

### LOCAL function

If the broadcast station is very near, the FM broadcast signal may be too strong, resulting in noise and distortion. In this case, press the LOCAL button. The LOCAL indicator lights.

## Remote Control Unit

① **POWER button**

② **FUNCTION button**

Use to select the input source. Each time the button is pressed, the input source changes in the order:

→ CD → VCR → PHONO → TUNER → TAPE →

As each source is selected, the corresponding indicator lights.

③ **SCAN button**

Use when you wish to scan the radio stations stored in the memory. Each station will be received for about five seconds before moving automatically to the next station.

④ **TAPE II operation buttons**

Same as Deck II operation buttons and Deck II control buttons on the cassette deck amplifier (except Mute).

⑤ **SHIFT TAPE I button**

To operate Deck I, press the desired deck operation while pressing this button.

⑥ **Timer operation buttons**

SLEEP : Sets the sleep timer.

SNOOZE : Turns off power if pressed after timer playback begins. Timer playback begins again approx. 5 minutes later.
The amplifier input selector automatically switches to the music source being operated when you press the CD playback (►), cassette deck playback (◄, ►), or tuner station controls.

⑦ **VOLUME + (UP)/– (DOWN) buttons**

When pressed, VOLUME on the amplifier is actually moved by a motor.

⑧ **SFC MODE button**

Use to select one of the preset sound fields. Each time the button is pressed, one of the preset sound fields will be selected, in the following order:

→ MOVIE → DISCO → HALL →
off* ←

*Set SURROUND & WIDE to off, and set the graphic equalizer to its flat setting.

⑨ **PGM (PROGRAM) MODE button**

This button is used when selecting one of your own personally created sound fields. Each time the button is pressed, one of the sound fields will be selected, in the following order:

→ A → B → C →
off* ←

*Set SURROUND & WIDE to off, and set the graphic equalizer to its flat setting.

⑩ **TUNER STATION – (DOWN)/ + (UP) buttons**

- Used for locating Stations (see pages 15, 16).

+ (UP) : Stations change in order in the upward direction

– (DOWN): Stations change in order in the downward direction.

⑪ **CD operation buttons**

Perform the connections so that the CD player is operated by the remote control unit.

► : Play

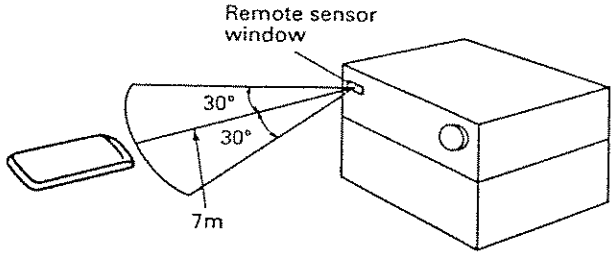
DISC : DISC selection

■ : Stop

II : Pause

|◄◄, ►►| : Track search

**Range of remote control**




When the remote control unit is pointed at the remote sensor window on the amplifier section and any of its buttons is pressed, the tuner and other components can be operated by remote control.

Distance: Within a range of approx. 7 meters (23 feet) from the remote sensor window.

Angle: Within approx. 30 degrees from the center of the remote sensor window.

Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window.

Performance of the remote control unit is adversely affected by strong fluorescent light. Keep such lights away, especially from the sensor window.

Double Deck Amplifier: DC-J210/DC-J110

- This unit has an automatic tape type selector.
- Tapes can be played back on deck I; tapes can be played back and recorded on deck II.
- Sound can be recorded as adjusted by the graphic equalizer.
- Use a TYPE I (normal) or TYPE II (HIGH/$CrO_2$) tape.

## ■ Amplifier section

### ① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational.
A minute flow of power feeds the unit to maintain operation readiness.
When the STANDBY indicator is on, the unit is in STANDBY.

### ② REMOTE SENSOR window

### ③ FUNCTION (DEMO) button and indicators

Use to select the input source. Each time the button is pressed, the input source changes in the order:

→ CD → VCR → PHONO → TUNER → TAPE →

As each source is selected, the corresponding indicator lights.

### ④ SURROUND & WIDE indicator

This lights when SURROUND & WIDE is on.

### ⑤ SOUND FIELD CONTROL buttons and indicator (MOVIE/A, DISCO/B, HALL/C) (See page 19)

These buttons are used when selecting one of the preset sound fields (MOVIE, DISCO, HALL), or one of your own original memory settings (PROGRAM A, B, C). The SFC indicator lights when this setting is selected.

### ⑥ GEQ MODE button (See page 18)

Use to recall preset equalization settings. Also use to program into memory desired sound field settings.

### ⑦ SFC OFF button

Press to reset the sound field control to no effect. Then, the SURROUND and WIDE to off, and set the graphic equalizer to its flat setting.

### ⑧ MEMORY button

Use to memorize your desired sound field control settings.

### ⑨ PRESET/PGM (PROGRAM) button

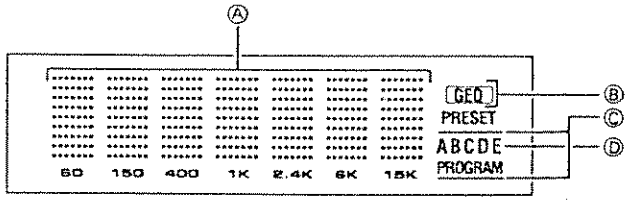
Use to switch between preset sound field control settings and your own personally created sound field setting.

### ⑩ SMART OPERATION buttons

START/SET: Use when programming memory and operating SMART OPERATION.

MEMORY : Use when programming SMART OPERATION into memory.

### ⑪ Display section




Ⓐ Visual display of spectrum analyzer and graphic equalizer.
Ⓑ This lights when the GEQ ON/OFF button is ON.
Ⓒ These underlines indicate the memory (PRESET or PROGRAM) that can be recalled with the PRESET/PGM or GEQ MODE button.
Ⓓ Display of the memory being recalled with the GEQ MODE button (A, B, C, D or E lights) or SOUND FIELD CONTROL buttons (A, B or C lights).

### ⑫ CURSOR EQUALIZER buttons

Use to adjust graphic equalizer settings.

◄, ► : Use these to change the frequency range to be adjusted.

UP, DOWN: Use these to adjust the degree of equalization.

### ⑬ Preset equalizer indicators

Lights when the desired preset equalizer is selected.

### ⑭ GEQ ON/OFF button

This switches the graphic equalizer ON/OFF. When it's ON, the GEQ indicator in the display section lights.

### ⑮ SURROUND & WIDE button (See page 19)

By turning this button ON, you can enjoy surround reproduction when rear speakers are used.

By turning this button ON, you can enjoy WIDE (stereo wide) reproduction with greater left-right spread when rear speakers are not used.

Each time the button is pressed the function changes in the following order:

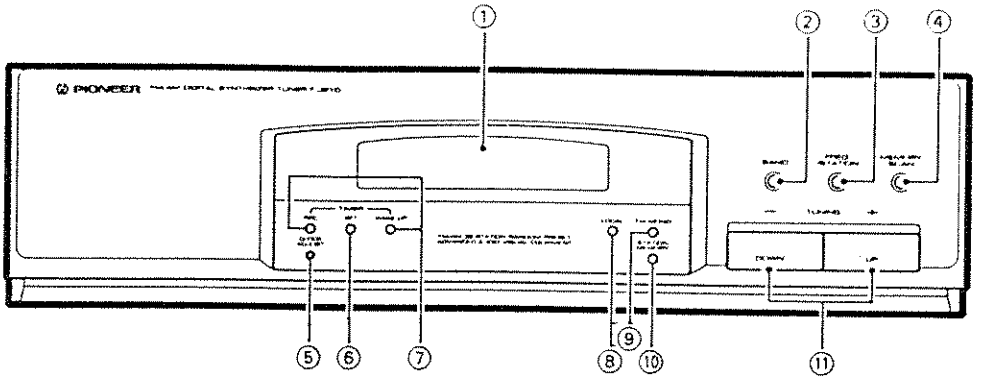
→ WIDE 1 → WIDE 2 → WIDE 3 → off →

The sense of left-right breadth increases as the numbers increase from 1 to 3.

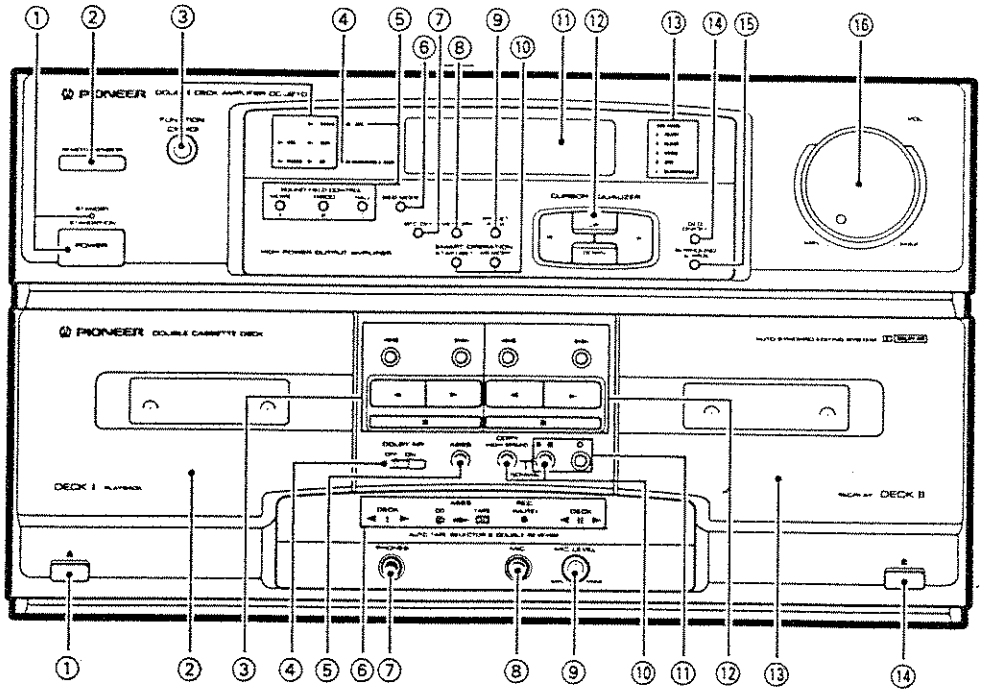
*NOTE:*
*In the case of monaural source, SURROUND & WIDE effects cannot be obtained.*

### ⑯ VOL. (Volume) control

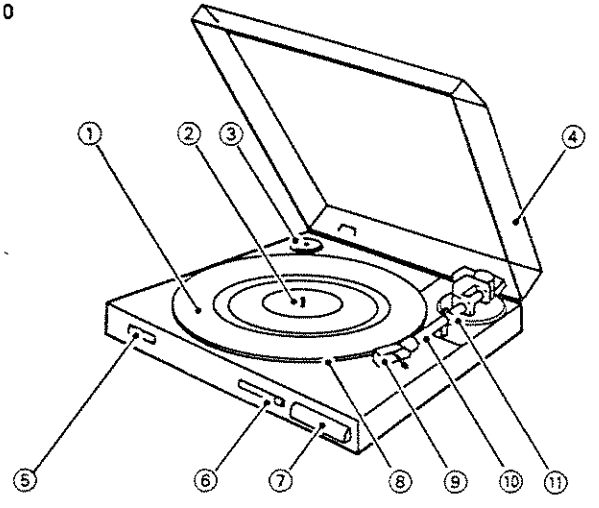
F-J210

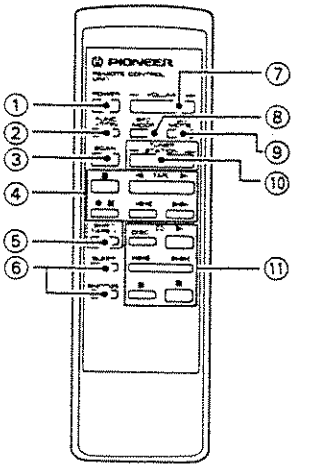


DC-J210/DC-J110
(The illustration of the double deck amplifier shows the Model DC-J210.)

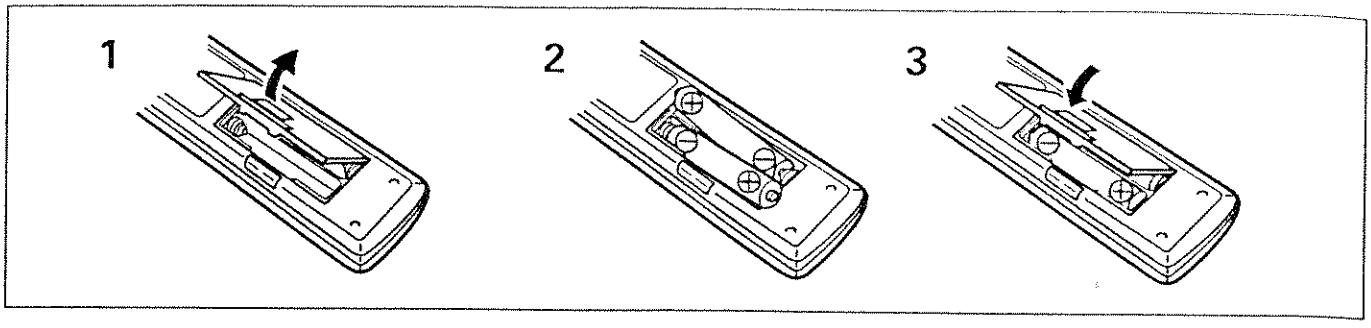


PL-J210





## LOADING BATTERIES INTO REMOTE CONTROL UNIT




1. Open the rear cover.
2. Install size "AAA" (IEC R03/UM-4) batteries, correctly matching polarity.
3. Close the cover.

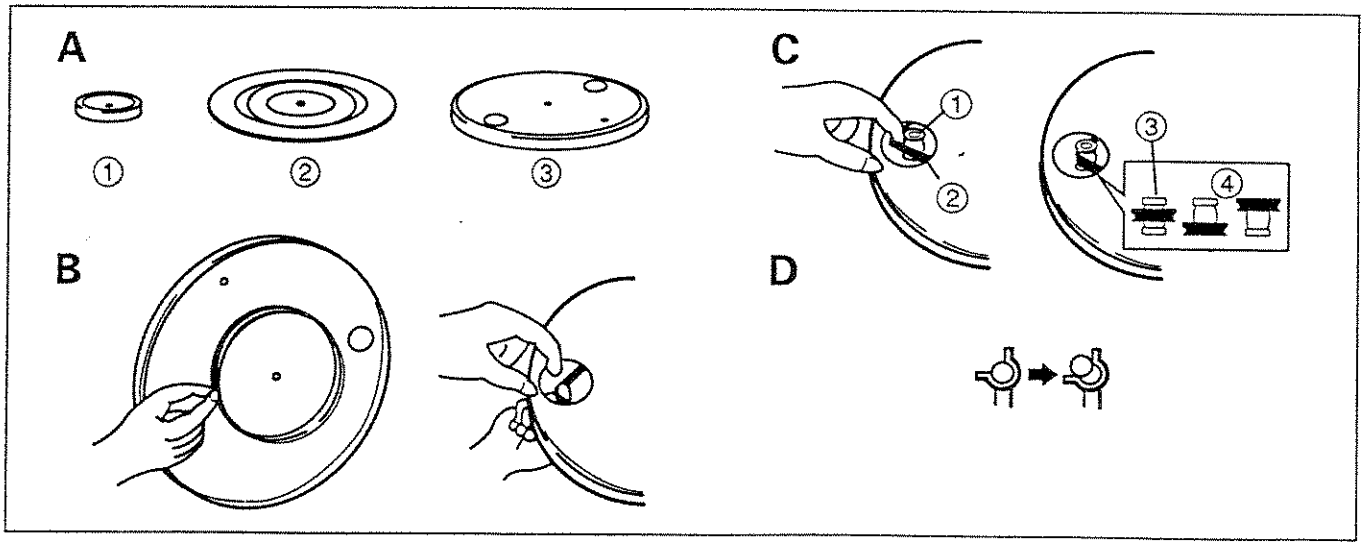
**Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:**

A: Always insert batteries into the battery compartment, correctly matching the positive ⊕ and negative ⊖ polarities, as indicated inside the compartment.

B: Never mix new and used batteries.

C: Batteries of the same size may have different voltages, depending on their type. Do not mix different types of batteries.

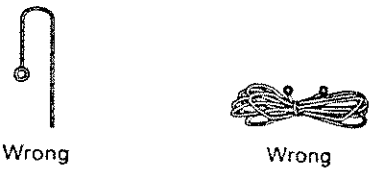
## PL-J210 TURNTABLE SET UP



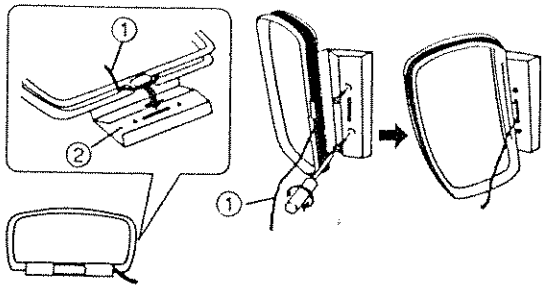

1. Check the parts (See Fig. A).
   ① EP adaptor (You will find this taped on the cabinet.)
   ② Platter mat
   ③ Platter
2. Pinch belt on inner rim between thumb and forefinger (See Fig. B).
3. Slip belt over finger and pull out, inserting finger in hole.
4. Insert finger from top of platter and transfer belt to forefinger.
5. Lower platter onto spindle.
6. Release belt onto pulley (See Fig. C).
   ① Pulley
   ② Belt
   ③ Correct
   ④ Incorrect
7. Place platter mat on platter (with "PIONEER" side up).
8. Remove the vinyl band holding the tonearm.
9. Remove plastic cover from cartridge stylus.
10. Remove the tonearm from the armrest (See Fig. D).

# ANTENNA CONNECTIONS

4




6

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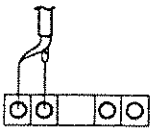

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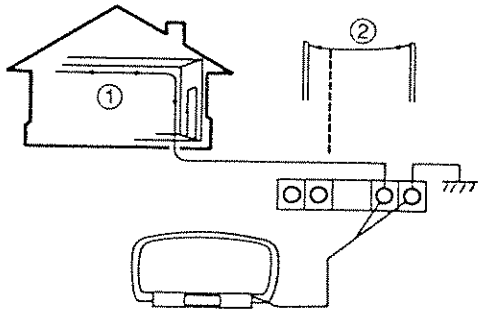


**Radio reception is not possible unless the antenna is properly connected.**

The strength of broadcast signals varies from one area to another. Signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas. Proper antenna installation is vital to good reception.

## FM ANTENNA

### FM antenna attachment (Fig. 4)

Connect the accessory FM antenna to the FM terminals. Extend the antenna out to its full length, and affix it to a wall, etc.

### External FM antenna installation (Fig. 5)

Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory FM antenna, or when the sound heard is accompanied by large amounts of noise.

## AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

### Setting up the AM antenna (Fig. 6)

- Insert the clip on the bottom of the antenna into the groove on the leg.
- To permanently fix the antenna, screw the leg to a wall or something similar before assembling (fixing the antenna in the direction that gives the best reception).
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

① lead wire ② leg

### External AM antenna (Fig. 7)

① **Indoor AM antenna**
Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

② **Outdoor AM antenna**
If reception is still poor even when a lead antenna has been fully extended indoors, stretch out a vinyl-coated wire and secure it outdoors.

*NOTE:*
*Do not detach the AM loop antenna when using the external AM antenna.*

### FM/AM CHANNEL SWITCH

Adjustment is only necessary when there is a CHANNEL STEP switch at the rear panel.
The CHANNEL STEP switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel step standard of the area where the tuner is sold. Depending on the position of this switch, each time TUNING buttons are pressed, the frequency display changes by the following amount:

**[100 kHz/10 kHz] position**
For areas with channel step of 100 kHz for FM and 10 kHz for AM.

**[50 kHz/9 kHz] position**
For areas with channel step of 50 kHz for FM and 9 kHz for AM.

*NOTE:*
*If the switch is set to the wrong position, correct tuning may not be possible.*

Consult your dealer if you are not sure about the radio channel step standard in your area.

# CAUTIONS REGARDING HANDLING

## LOCATION

**Install the unit in a well ventilated location where it will not be exposed to high temperature or humidity.**
Do not install the unit in a location which is exposed to direct sunlight, or near to hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the unit in a damp or dusty environment may result in malfunction or accident. (Also avoid installation near cookers etc., where the unit may be exposed to smoke from oil, steam or heat.)

## PRECAUTIONS REGARDING INSTALLATION

- Placing and using the unit for long periods on heat-generating sources such as amplifiers will affect performance. Avoid placing the unit on the heat-generating sources.
- Install the unit as far as possible from TV sets. The unit installed in close proximity to such equipment may cause noise or degradation of the picture. Such noise may be particularly noticeable when an indoor antenna is used. In such a case, make use of an outdoor antenna, or turn off power to the unit.

## CAUTION CONCERNING TURNTABLE INSTALLATION

If the turntable is placed directly on or very close to a speaker, the vibrations from the speaker may be transported to the tonearm's cartridge, thus causing feedback howling. Be sure that speakers are placed sufficiently away from the turntable.

## CONDENSATION

When the unit is brought into a warm room from previously cold conditions or when the room temperature is suddenly increased, condensation may form inside and the unit may not be able to attain its full performance. If this occurs, allow the unit to stand for about an hour or raise the room temperature gradually.

# CONNECTIONS

**1**